# SNF-28-15

# Ka Band Full Waveguide Band Junction Isolator, 25 Watts

#### **Description:**

**Model SNF-28-I5** is a Ka band, full waveguide band junction isolator that covers the frequency range of 26.5 to 40 GHz. The full waveguide band isolator is designed and manufactured to provide a typical insertion loss of 0.50 dB with good flatness. Compared to a Faraday isolator, it offers a much shorter insertion length for system integration. The isolator also offers a moderate isolation of 17 dB and a forward power handling of 25 Watts. The input and output ports are WR-28 waveguides with UG-599/U flanges.



#### Features:

- Full Waveguide Band Operation
- Low Insertion Loss
- Moderate Isolation
- High Power Handling

## **Applications:**

- 5G Systems
- Instrumentation
- Communication Systems
- Radar Systems

Parameter	Minimum	Typical	Maximum
RF Frequency	26.5 GHz		40.0 GHz
Insertion Loss		0.50 dB	0.80 dB
Isolation		17 dB	
Return Loss		15 dB	
Forward Power Handling			25 W (CW)
Reverse Power Handling			10 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

## **Mechanical Specifications:**

ltem	Specification
RF Input and Output	WR-28 Waveguide with UG-599/U Flange
Body Material	Aluminum
Finish	Chem Film
Weight	0.8 Oz
Insertion Length	0.87"
Outline	NF-IA-DB1



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

## **Electrical Specifications:**

# Ka Band Full Waveguide Band Junction Isolator, 25 Watts



**Typical Performance vs. Frequency** 

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com Rev. 1.0

## Ka Band Full Waveguide Band Junction Isolator, 25 Watts

#### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25°C case temperature.
- Other mechanical configurations are available under different model numbers.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

- Exceeding absolute maximum ratings of the device will damage the device.
- The device is magnetic field sensitive. Always keep magnetic fields a minimum of 6 inches away.
- Any foreign objects in the waveguide will destroy the device.





www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com